

NEW ABSTRACT

A lamp system includes a gas-discharge lamp with a color point in the green-blue, and an LED with a color point in the yellow-red. An optical component is provided for additive mixing of the light from the gas-discharge lamp and the LED. A blue and green emitting fluorescent lamp may be used as the gas-discharge lamp, and a red-yellow-emitting AlGaInP LED or a red-emitting AlGaAs LED as the LED. Through additive mixing of the light from these high-efficiency light sources, a highly efficient light source is provided having good color rendering, which contains all three primary colors and is particularly suited to the highly efficient generation of white light.